



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

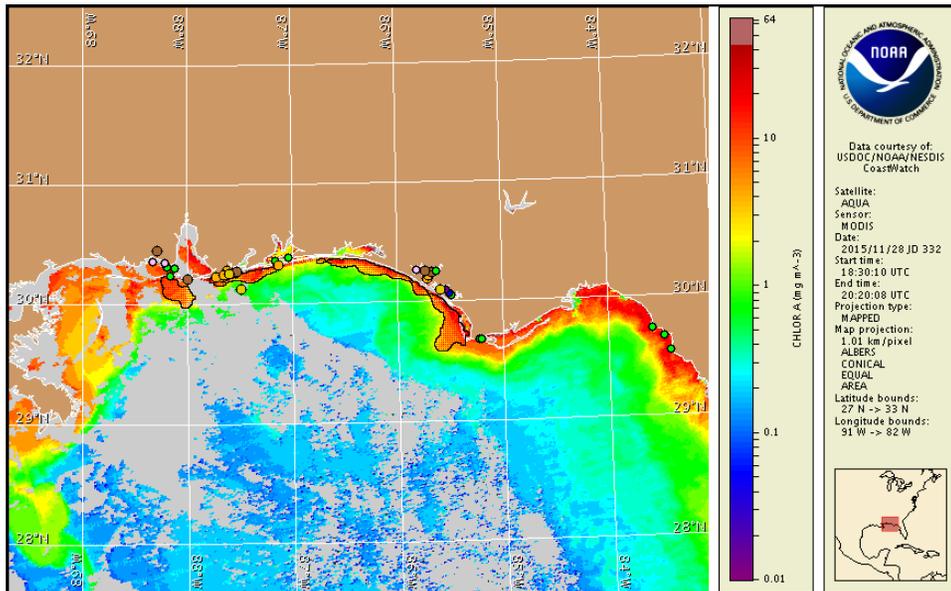
Monday, 30 November 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Wednesday, November 25, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from November 20 to 27: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Not present to medium concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore Mobile and Baldwin counties in Alabama and portions of northwest Florida from Escambia to Gulf counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for alongshore Alabama and northwest Florida Monday, November 30 to Thursday, December 3 is listed below:

County Region: Forecast (Duration)

Mobile County: Low (M, W-Th) Very Low (Tu)

Baldwin County: Moderate (M-Tu) Low (W) Very Low (Th)

Baldwin County, bay regions-Perdido Bay area: Moderate (M-Th)

Escambia County: Moderate (M-W) Very Low (Th)

Santa Rosa County: Moderate (M-T) Low (W) Very Low (Th)

Okaloosa County: Moderate (M-T) Low (W) Very Low (Th)

Okaloosa County, bay regions: Very Low (M, W-Th) None (Tu)

Walton County: Low (M-W) Very Low (Th)

Bay County: Low (M-W) Very Low (Th)

Bay County, bay regions: Low (M-Tu) Moderate (W-Th)

Gulf County: Very Low (M-Tu, Th) Low (W)

Gulf County, west bay regions-St. Joseph Bay area: Moderate (M, W-Th) Low (Tu)

All Other NWFL County Regions: None expected (M-Th)

SWFL County Regions: Visit <http://tidesandcurrents.noaa.gov/hab/#swfl>

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Multiple reports of respiratory irritation were received from Okaloosa and Escambia counties over the past several days. Additionally, reports of dead fish were received from Escambia County over the past few days.

Analysis

Samples collected from Alabama and northwest Florida indicate the presence of *Karenia brevis* alongshore from Mobile County, Alabama to Gulf County, Florida.

In northwest Florida, recent samples continue to confirm up to 'medium' concentrations of *K. brevis* in the bay regions of Bay County and alongshore Escambia County (FWRI; 11/24-25). In Alabama, recent samples identified up to 'medium' concentrations of *K. brevis* in the Perdido Bay region of Baldwin County. No new samples have been received from Louisiana; however, the most recent samples (Nov. 19) indicated that *K. brevis* was not present alongshore Jefferson, Plaquemines, and St. Bernard parishes (FDA). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

In recent ensemble imagery (MODIS Aqua, 11/28), patches of elevated to very high chlorophyll (1 to >20 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible along- and offshore from Mobile County, Alabama eastward to Gulf County, Florida. Additional

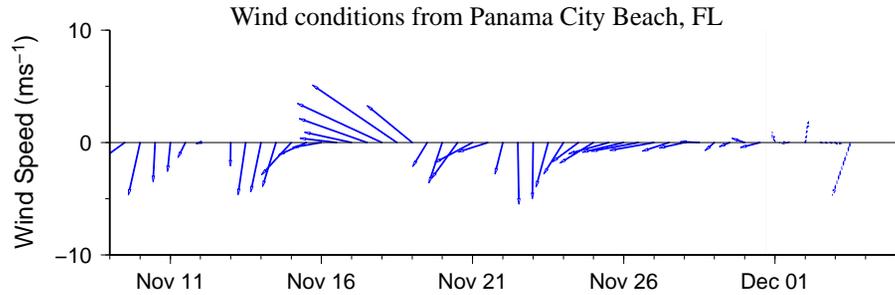
sampling alongshore and in the bay regions of Alabama and northwest Florida is recommended.

Wednesday and Thursday light and offshore forecast winds will reduce the potential for impacts at the coast.

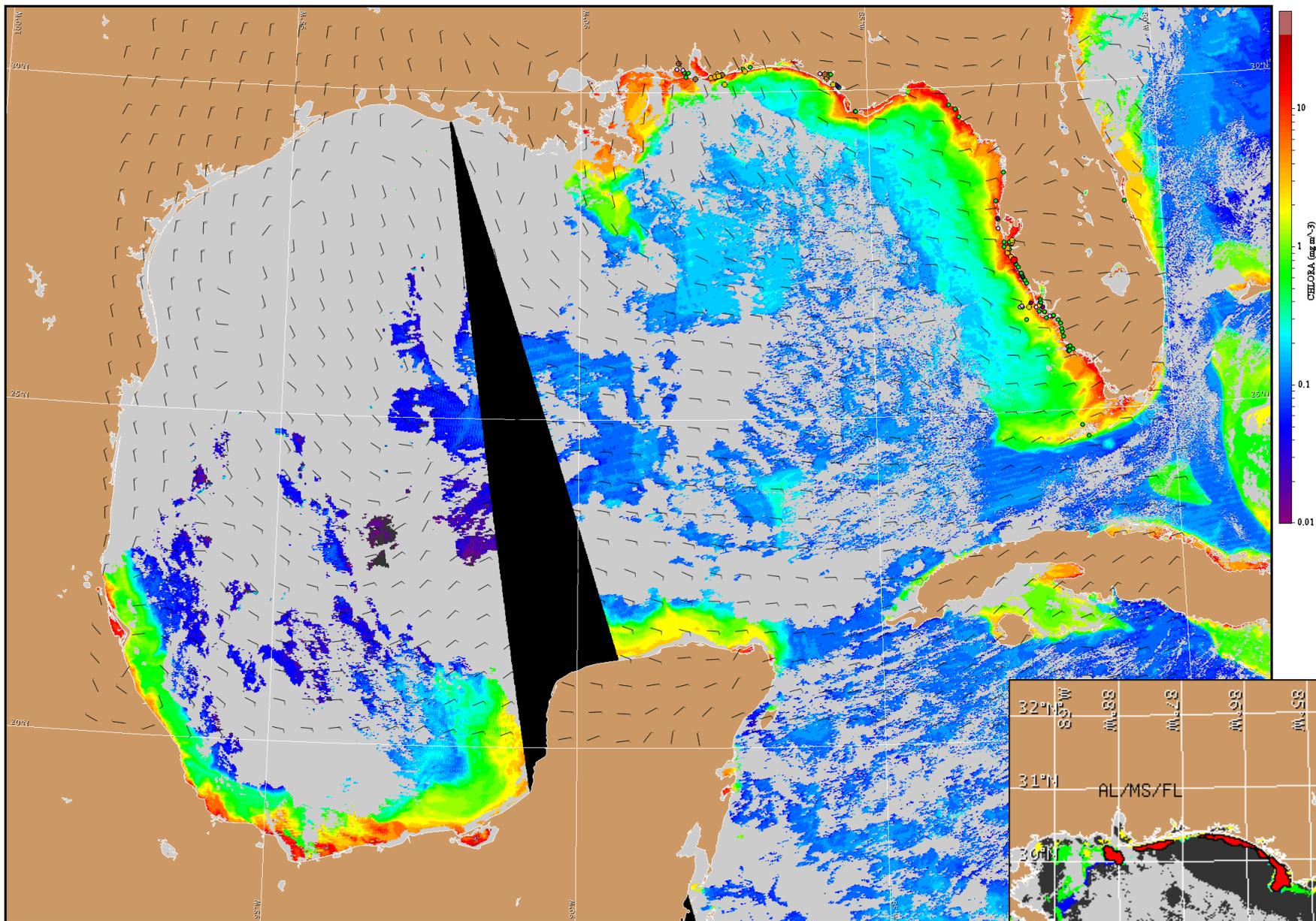
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Wind Analysis

Escambia to Gulf counties: Southeasterly winds (5-10 kn, 3-5 m/s) today and Tuesday. Variable winds (up to 10 kn, 5 m/s) Wednesday. Northerly to northeasterly winds (10-20 kn, 5-10 m/s) Wednesday night through Thursday.

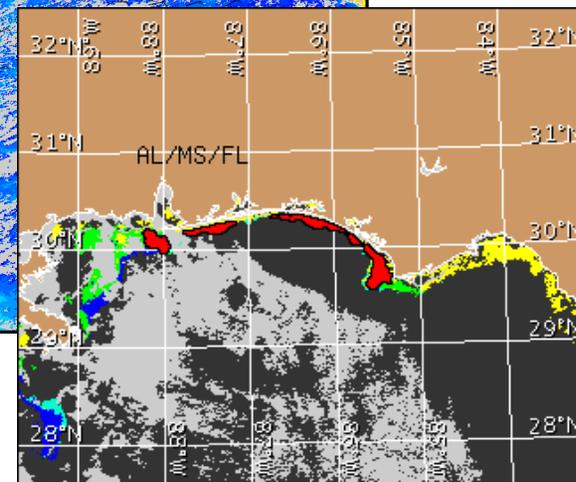


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



Satellite chlorophyll image and forecast winds for December 1, 2015 12Z with points representing cell concentration sampling data from November 20 to 27: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).